

CLAIMS

I claim:

1. An elevator system, comprising:
at least one guide rail;
5 a cab that is adapted to move along the guide rail; and
a guiding device associated with the cab and including a plurality of
rollers that are resiliently urged into contact with the guide rail, the guiding device
automatically positioning the cab relative to the guide rail.
- 10 2. The system of claim 1, wherein the rollers remain a fixed distance
from each other.
3. The system of claim 1, wherein the guiding device includes a roller
mount that supports the plurality of rollers such that the rollers remain a fixed distance
15 from each other along the mount.
4. The system of claim 3, wherein the guiding device includes a base and
the roller mount is moveably supported on the base.
- 20 5. The system of claim 4, including a biasing member that urges the
mount relative to the base to thereby urge the rollers into engagement with the rail.
6. The system of claim 5, wherein the biasing member comprises a
spring.
25
7. The system of claim 5, wherein the biasing member urges the roller
mount in a direction that resists lateral movement of the base relative to the guide rail.
8. The system of claim 7, including at least one low-friction insert
30 supported on the roller mount, the insert being adapted to resist movement of the base
in a direction perpendicular to the direction of lateral movement resisted by the
biasing member.

9. The system of claim 3, including a roller oriented generally perpendicular to the rollers supported on the roller mount.

10. A device for guiding movement of an elevator cab along a guide rail, comprising:

a base;

5 a roller mount moveably supported by the base;

a plurality of rollers supported on the roller mount; and

a biasing member that urges the roller mount in a direction to urge the rollers into engagement with the guide rail.

10 11. The device of claim 10, wherein the rollers remain a fixed distance from each other on the roller mount.

12. The device of claim 10, wherein the roller mount selectively rotates about an axis and the biasing member urges the roller mount to rotate in one direction
15 about the axis.

13. The device of claim 10, wherein the biasing member comprises a spring that resiliently maintains the roller mount in a selected position.

20 14. The device of claim 10, wherein the biasing member is operative to center the base relative to the guide rail and including at least one other member that is operative to resist movement of the base in a direction perpendicular to a plane of the base.

25 15. The device of claim 14, wherein the other member comprises an insert supported on the roller mount.

16. The device of claim 14, wherein the other member comprises a roller supported by the base and having an axis of rotation that is perpendicular to axes of
30 the plurality of rollers.

17. The device of claim 10, wherein the roller mount includes a brace member extending generally parallel to axes of the plurality of rollers and that is adapted to engage a surface on the guide rail responsive to lateral movement of the base relative to the guide rail.

5

18. The device of claim 10, wherein the base includes a guide surface adapted to engage a surface on a guide rail responsive to lateral movement of the base relative to the guide rail.

10

19. The device of claim 10, wherein the biasing member comprises a spring and a threaded member for adjusting a distance between a support surface on the roller mount and a support surface on the base to thereby selectively adjust a tension on the spring.

15